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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,565	10/17/2003	Toshinori Takatsuka	04208.0191	8961

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EXAMINER

SHAPIRO, LEONID

ART UNIT PAPER NUMBER

2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/686,565

Applicant(s)

TAKATSUKA ET AL.

Examiner

Leonid Shapiro

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 and 36-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36-38 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 13-14, 18 is/are rejected.
- 7) ☒ Claim(s) 7, 9-12, 15-17, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2,5-6,8,13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Arita et al. (US Patent no. 5,504,502).

As to claim 1, Arita et al. teaches a pointing device (See Col. 1, Lines 13-15) comprising:

a printed circuit board (See Fig. 1,item 17);

a plurality of magnetic sensors placed on said printed circuit board (See Fig. 1,items 14,14');

an elastic member mounted on said printed circuit board the elastic member having a hollow for enabling sway in any desired direction (See Fig. 1,items 11-13,17, Col. 4, Lines 37-62);

a rigid pushing member placed on said elastic member (See Fig. 3,item 10b, Col. 4, Lines 63-67);

and

a magnet mounted on said elastic member, wherein said elastic member is adapted to be deformed by an external force and to return the magnet to an initial position when the external force is removed (col. 10, lines 27-28), said hollow being enclosed by said printed circuit board (See Fig. 1,items 11-13,17, Col. 4, Lines

Art Unit: 2629

37-62), and said plurality of magnetic sensors detect magnetic flux density changes caused by a sway of said magnet due to elastic deformation of said elastic member (See Fig. 1, items 11-13, 18, Col. 4, Lines 37-62).

As to claim 2, Arita et al. teaches pushing member has a top whose area is greater than an area of said magnet (See Fig 1, item 18 and Fig. 3A, items 10).

As to claim 5 Arita et al. teaches magnetic sensors are placed symmetrically along X axis and Y axis on a plane, and said magnet is disposed at about a center of said magnetic sensors (See Figs. 9A-9B, items 18, 28, Col. 6, Lines 1-5).

As to claims 6, 8 Arita et al. teaches a switch on an elastic member side surface of said printed circuit board (See Figs. 1, 18, item 15, Col. 4, Lines 38-50).

As to claim 13 Arita et al. teaches that magnet displaceable in a direction perpendicular to said printed circuit board (See Fig. 1, items 17-18).

As to claim 14 Arita et al. teaches at least one bend that forms said hollow (See Fig. 1, item 12 and Fig. 18, item 13e).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2629

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arita et al. in view of Hinata et al. (US Patent No. 5,179,460).

Arita et al. does not disclose elastic member consisting of silicone resin.

Hinata et al. teaches elastic layer consisting of silicone resin (See Fig.12, item 32, Col. 5, Lines 58-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teachings of Hinata et al. into Arita et al. system in order to use elasticity of silicone resin (See Col. 5, Lines 64-66 in the Hinata et al. reference).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arita et al. in view of Ogawa (US Patent No. 5,565,632).

Arita et al. does not disclose magnet and elastic member are replaced by rubber magnet.

Ogawa teaches elastic material formed of ferrite rubber into which a magnetic material is dispersed (See Col. 6, Lines 35-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teachings of Ogawa into Arita et al. system in order to simplify manufacturing procces.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arita et al. in view of Endo et al. (US Patent No. 6,670,946 B2).

Arita et al. does not disclose a second elastic member mounted on an edge of said elastic member or on said pushing member; a manipulation member mounted on said second elastic member; and a second magnet mounted on said second elastic member or said manipulation member.

Endo et al. teaches a second magnet (See Fig. 5, items 14,18, Col. 5, Lines 1-16).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teachings of Endo et al. into Arita et al. system in order to reduce size (See Col. 5, Lines 61-67).

#### ***Allowable Subject Matter***

5. Claims 36-38 are allowed.

6. Claims 7,9-12,15-17,19-20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Relative to claim 7 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that pointing device further comprising a protrusion formed at a portion facing said switch on said elastic member, wherein said protrusion is provided for depressing said switch.

Relative to claim 9 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that elastic member and said magnet are glued at only a center of said magnet.

Relative to claim 10 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that said elastic member has a hollow that is made in such a manner that a portion where said magnet is placed and its neighborhood are made thinner than a remaining portion where said magnet is not placed.

Relative to claim 11 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that elastic member comprises at least one projection toward said printed circuit board in said hollow.

Claim 12 depends on claim 11.

Relative to claim 15 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that bend includes a U grooved undercut.

Relative to claim 16 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that said U grooved undercut has a depth less than a thickness of said elastic member.

Relative to claim 17 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that said bend of said elastic member has a chamfer or rounding.

Relative to claim 19 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that said second elastic member includes a second hollow to enable said manipulation member to be swayed in any desired direction; and said second magnet is mounted on said second

Art Unit: 2629

hollow side.

Relative to claim 20 the major difference between the teaching of the prior art of record (Arita et al. and Endo et al.) and the instant invention is that a hold-down member mounted on an edge of said elastic member or on said pushing member; a manipulation member whose movement is restrained by said hold-down member; and a second magnet mounted on said manipulation member.

### ***Response to Arguments***

7. Applicant's arguments filed 12/22/06 have been fully considered but they are not persuasive:

On page 10, last paragraph of Remark, Applicant's stated that Arita cannot anticipate claim 1 under 35 U.S.C. § 102(b) because the reference does not disclose, at least, that an "**elastic member is adapted to be deformed by an external force and to return the magnet to an initial position when the external force is removed,**" as recited in amended claim 1. However, Arita stated that **elastic member has an ability for a self-alignment to origin position** (col. 10, lines 27-28).

On page 11, first paragraph of Remark, Applicant's stated that Arita discloses "return means such as garter springs" for automatically returning slider 10 to its origin. (Col. 7:59-67). However, Arita stated that spring could be replaced by elastic material (col. 10, lines 24-25).



On page 11, 2<sup>nd</sup> paragraph of Remark, Applicant's stated that Arita slider 10 cannot move in a direction parallel to printed circuit board due to the dome-shape of slider 10 and housing 13. However, if garter spring could be replaced by elastic material (see previous paragraph) all movement limitations could be also removed.

Notice, that "move in a direction parallel to printed circuit board" is not in claims. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (see above) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 11, last paragraph of Remark, Applicant's stated that Arita fails to teach an "elastic member having a hollow" where "said hollow being enclosed by said printed circuit board," as-recited in amended claim 1. However, figure 1 clearly shows hollow between printed circuit board (14) and elastic member (11).

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2629

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Telephone Inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/686,565  
Art Unit: 2629

Page 10

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03.28.07



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